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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,724	10/22/2003	Minas H. Tanielian	BOEI-1-1215	6828

7590 08/25/2004

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EXAMINER

ELDRED, JOHN W

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,724

Applicant(s)

TANIELIAN

Examiner

J. Woodrow Eldred

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-81 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02232004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

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DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 78-81 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Dependent claims 78-81 are vague and indefinite since they depend from a base claim drawn to the method of positioning a vehicle at a particular aerial location but these claims do not claim aerial vehicles.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-11, 33-44 and 66-75 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one of McKown et al, Rampolla et al, or Krammer et al.

See especially Figure 1 of each patent.

5. Claims 1-3, 5-9, 19, 34-36, 38-42, 49, 67-69, 71-74, and 81 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fallon et al.

See especially column 4, lines 28-64.

6. Claims 1-9, 17, 34-42, 50, 67, 78, and 79 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Marriott, Jr. et al.

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See especially paragraph 38-40.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 18, 51, and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of McKown et al, Rampolla et al or Krammer et al in view of Heizmann-Bartels.

Each of McKown et al, Rampolla et al and Krammer et al disclose a laser position control system and vehicle with an array of photoelectric detectors. These vehicles are not drawn to underwater vehicles, however. Heizmann-Bartels teach that it is known to have underwater laser controlled vehicles. See especially paragraph 40. Motivation to combine is the mere substitution of a known control system to perform the same function on a vehicle in a different environment. To employ the teachings of Heizmann-Bartels on the system of either McKown et al, Rampolla et al or Krammer et al and have an underwater vehicle is considered to have been obvious to one having ordinary skill in the art.

9. Claims 20-30 and 53-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of McKown et al, Rampolla et al or Krammer et al in view of Foote.

Each of McKown et al, Rampolla et al and Krammer et al disclose a laser position control system and vehicle with an array of photoelectric detectors. These vehicles are not shown carrying the claimed sensor and communication equipment. Foote teaches that it is known to have a selection of sensor and communication equipment on beam receiving unmanned vehicle. See especially column 10, lines 13-34. Motivation to combine is the mere substitution of known payload systems to perform well known functions on an unmanned vehicle. To employ the teachings of Foote on the system of any one of McKown et al, Rampolla et al or Krammer et al and have the claimed sensor and

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communication elements is considered to have been obvious to one having ordinary skill in the art.

10. Claims 16, 49, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of McKown et al, Rampolla et al or Krammer et al in view of Hutchinson.

Each of McKown et al, Rampolla et al and Krammer et al disclose a laser position control system and vehicle with an array of photoelectric detectors. These vehicles are not drawn to lighter-than-air vehicles, however. Hutchinson teaches that it is known to have remote controlled lighter-than-air vehicles. See especially the abstract. Motivation to combine is the mere substitution of a known control system to perform the same function on a different type of airborne vehicle. To employ the teachings of Hutchinson on the system of either McKown et al, Rampolla et al or Krammer et al and have a lighter-than-air vehicle is considered to have been obvious to one having ordinary skill in the art.

11. Claims 12-15, 45-48, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of McKown et al, Rampolla et al or Krammer et al in view of Rios.

Each of McKown et al, Rampolla et al and Krammer et al disclose a laser position control system and aircraft vehicle with an array of photoelectric detectors. These vehicles are not drawn to aircraft vehicles with rotors, however. Rios teaches that it is known to have remote controlled rotor vehicles. See especially column 1, line 58- column 2, line 9. Motivation to combine is the mere substitution of a known control system to perform the same function on a different type of airborne vehicle. To employ the teachings of Hutchinson on the system of either McKown et al, Rampolla et al or Krammer et al and have a rotor aircraft is considered to have been obvious to one having ordinary skill in the art.

12. Claims 31, 32, 64, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of McKown et al, Rampolla et al or Krammer et al in view of Margolin.

Each of McKown et al, Rampolla et al and Krammer et al disclose a laser beam position control system and vehicle with an array of photoelectric detectors. The use of an energy weapon to produce the electromagnetic control beam is not disclosed. Margolin teaches that it is known to

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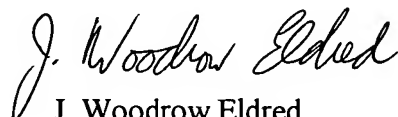
have use an energy weapon beam as a control beam. See especially the abstract. Motivation to combine is the mere substitution of a known electromagnetic beam sources to perform the same function. To employ the teachings of Hutchinson on the system of either McKown et al, Rampolla et al or Krammer et al and have an energy weapon beam as the control beam is considered to have been obvious to one having ordinary skill in the art.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bodkin, Jones et al, Paulet et al, and Autechaud et al are cited as being of interest since they disclose control systems and electromagnetic beam systems.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Woodrow Eldred whose telephone number is 703-306-4151. The examiner can normally be reached on Monday to Thursday, from 8:00 a.m. to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Woodrow Eldred
Primary Examiner
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